

CLAIMS

What is claimed is:

1. An apparatus for use with a listening device, comprising:
an assistive listening device cap; and
data communication electronics inside the assisted listening device cap;

wherein the assistive listening device cap is configured to be capable of mechanically attaching to the exterior surface of a cochlear implant headpiece; and

wherein the data communication electronics are configured to communicate with corresponding communication electronics within the headpiece.

2. The apparatus of Claim 1, wherein the data communication electronics are configured to communicate with corresponding communication electronics of at least one of an earhook, a behind-the-ear cochlear implant speech processor unit, a Bluetooth enabled phone adapter, and an external component unit of a hearing aid system.

3. The apparatus of Claim 1, wherein the data communication electronics are configured to communicate with corresponding communications electronics implanted within the head of a patient with impaired hearing.

4. The apparatus of Claim 1, wherein the data communication electronics are configured to communicate with the communication electronics of the headpiece through direct electrical contacts.

5. The apparatus of Claim 1, wherein the data communication electronics are configured to communicate with corresponding communication electronics through at least one of infra-red signals, radio-frequency signals, optical data signals, and Bluetooth wireless signals.

6. The apparatus of Claim 1, wherein the data communication electronics are configured to communicate with corresponding communication electronics through a conductive wire.

7. The apparatus of Claim 1, wherein the data communication electronics are powered by at least one of a primary battery located within the assistive listening device cap, a rechargeable battery located within the assistive listening device cap, and an external power source capable of transmitting energy to the electronics of the assistive listening device cap.

8. The apparatus of Claim 1, wherein the assistive listening device cap is configured to be capable of mechanically attaching to the exterior surface of a cochlear implant headpiece by means of magnetic force.

9. A system for an individual with impaired hearing, comprising:
a behind-the-ear unit;
a headpiece configured to communicate with the unit; and

an assistive listening device cap configured to attach to the headpiece.

10. The system of Claim 9, the behind-the-ear unit including a cochlear implant speech processor.

11. The system of Claim 9, wherein the assistive listening device cap includes:

data communication electronics;

wherein the assistive listening device cap is configured to mechanically attach to the exterior surface of a cochlear implant headpiece; and

wherein the data communication electronics are configured to communicate with corresponding communication electronics within the headpiece.

12. The system of Claim 11, wherein the data communication electronics are configured to communicate with corresponding communication electronics of at least one of the behind-the-ear unit, the headpiece, an earhook attached to the behind-the-ear unit, and a Bluetooth enabled phone adapter.

13. The system of Claim 11, wherein the data communication electronics are configured to communicate with corresponding communications electronics implanted within the head of a patient with impaired hearing.

14. The system of Claim 11, wherein the data communication electronics are configured to communicate with the communication electronics of

the headpiece through at least one of direct electrical contacts, wireless signals, and electrically conductive wire.

15. The system of Claim 11, wherein the data communication electronics are powered by at least one of a primary battery located within the assistive listening device cap, a rechargeable battery located within the assistive listening device cap, and an external power source capable of transmitting energy to the electronics of the assistive listening device cap.

16. The system of Claim 9, wherein the assistive listening device cap is configured to mechanically attach to the headpiece by means of magnetic force.

17. A system for an individual with impaired hearing; comprising:
a behind-the-ear unit;
a phone adapter configured to mechanically and electrically couple with the behind-the-ear unit;
a headpiece in communication with the behind-the-ear unit; and
an assistive listening device cap configured to mechanically attach to the headpiece.

18. The system of Claim 17, wherein the phone adapter includes Bluetooth wireless communication technology and is capable of being configured to wirelessly communicate with at least one of a cell phone and a telephone.

19. The system of Claim 17, wherein the assistive listening device cap includes Bluetooth wireless communication technology and is capable of being configured to communicate with the phone adapter.

20. The system of Claim 17, wherein the phone adapter further includes:

a microphone in communication with a speech processor of the behind-the-ear unit;

an LED light indicator configured to indicate the operational status of the phone adapter; and

a multi-function button accessible along the exterior surface of the phone adapter.